

CLAIMS

1. A method for presenting the content of images, in which, out of images that include at least moving images and can be segmented into a plurality of scenes, groups of two or more key images included in the individual scenes are extracted, and a digest screen of the images which includes the groups of key images, is organized, the method comprising, at least:

a scene segmenting step of segmenting the images into individual scenes with scene segmenting means, and for each scene the following three steps are provided,

a key-image extracting step of extracting a still image which is made a key image at a point of time from each scene with key-image selecting means,

a preceding-and-following-key-image extracting step of extracting at least one still image time-oriented preceding the key image and/or at least one still image time-oriented following the key image from each scene with preceding-and-following-key-image selecting means, and,

a key-image weighting step of assigning a weight to the key image in each scene on the basis of a predetermined measure with key-image weighting means;

a scene organizing step of, with scene organizing means, disposing the key images in the individual scenes in time-

oriented order, expanding or contracting the key images according to the corresponding weights, and organizing a digest screen on which the preceding and following key images can be disposed in the neighborhood of the corresponding key images; and

 a screen displaying step of displaying the digest screen with screen displaying means.

2. The method according to Claim 1, wherein, in the key-image weighting step, the key-image weighting means further assigns weights to the individual preceding and following key images on the basis of the predetermined measure, and,

 in the scene organizing step, the scene organizing means, according to the corresponding weights, enables or disables the display of the preceding and following key images and expands or contracts the preceding and following key images when the preceding and following key images are to be displayed to organize the digest screen.

3. The method according to Claim 1 or 2, further comprising:

 a detailed-key-image extracting step of, with the key-image selecting means, in a case where key images or preceding and following key images are specified through the digest screen, extracting as detailed key images at least

two still images from scenes that include the specified key images or preceding and following key images;

a preceding-and-following-detailed-key-image extracting step of extracting at least one still image time-oriented preceding each detailed key image and/or at least one still image time-oriented following each detailed key image with the preceding-and-following-key-image selecting means; and

a detailed-key-image weighting step of assigning weights to the detailed key images on the basis of a predetermined measure with the key-image weighting means,

wherein, in the scene organizing step, with the scene organizing means, the preceding and following detailed key images are disposed in the neighborhood of the corresponding detailed key images while the detailed key images in the scenes are disposed in time-oriented order, and the detailed key images are expanded or contracted according to the corresponding weights to organize a new digest screen, and,

in the screen displaying step, the new digest screen is displayed with the screen displaying means.

4. The method according to Claim 3, wherein, in the detailed-key-image weighting step, the key-image weighting means further assigns weights to the individual preceding and following detailed key images on the basis of the predetermined measure, and,

in the scene organizing step, the scene organizing means expands or contracts the preceding and following detailed key images according to the corresponding weights to organize the digest screen.

5. The method according to any one of Claims 1 to 4, further comprising:

a text defining step of, for the key image and the preceding and following key images or the detailed key images and the preceding and following detailed key images in the individual scenes, defining texts related to the corresponding still images or the scenes that include the corresponding still images with text defining means,

wherein, in the scene organizing step, the texts are expanded or contracted on the basis of a predetermined measure, and then the digest screen is organized with the texts and the corresponding still images.

6. An apparatus for presenting the content of images, in which, out of images that include at least moving images and can be segmented into a plurality of scenes, groups of two or more key images included in the individual scenes are extracted, and a digest screen of the images which includes the groups of key images is organized, the apparatus comprising, at least:

means for inputting the images;

scene segmenting means for segmenting the images into individual scenes;

key-image selecting means for extracting a still image at a point of time, the still image being a key image;

preceding-and-following-key-image selecting means for extracting at least one still image time-oriented preceding the key image and/or at least one still image time-oriented following the key image;

key-image weighting means for assigning a weight to the key image on the basis of a predetermined measure;

scene organizing means for disposing the key images in the individual scenes in time-oriented order, expanding or contracting the key images according to the corresponding weights, and organizing a digest screen on which the preceding and following key images can be disposed in the neighborhood of the corresponding key images; and

screen displaying means for displaying the digest screen.

7. The apparatus for presenting the content of images according to Claim 6, wherein the key-image weighting means further assigns weights to the individual preceding and following key images on the basis of the predetermined measure, and

the scene organizing means, according to the corresponding weights, enables or disables the display of the preceding and following key images and expands or contracts the preceding and following key images when the preceding and following key images are to be displayed to organize the digest screen.

8. The apparatus for presenting the content of images according to Claim 6 or 7, further comprising:

key-image specifying means for specifying key images or preceding and following key images through the digest screen,

wherein the key-image selecting means extracts as detailed key images at least two still images from scenes that include the specified key images or preceding and following key images,

the preceding-and-following-key-image selecting means extracts at least one still image time-oriented preceding each detailed key image and/or at least one still image time-oriented following each detailed key image,

the key-image weighting means assigns weights to the detailed key images on the basis of a predetermined measure,

the scene organizing means disposes the preceding and following detailed key images in the neighborhood of the corresponding detailed key images while disposing the detailed key images in the scenes in time-oriented order,

and expands or contracts the detailed key images according to the corresponding weights to organize a new digest screen, and

the screen displaying means displays the new digest screen.

9. The apparatus for presenting the content of images according to Claim 8, wherein the key-image weighting means further assigns weights to the individual preceding and following detailed key images on the basis of the predetermined measure, and

the scene organizing means expands or contracts the preceding and following detailed key images according to the corresponding weights to organize the digest screen.

10. The apparatus for presenting the content of images according to any one of Claims 6 to 9, further comprising:

text defining means, for the key image and the preceding and following key images or the detailed key images and the preceding and following detailed key images in the individual scenes, for defining texts related to the corresponding still images or the scenes that include the corresponding still images,

wherein the text defining means expands or contracts the texts on the basis of a predetermined measure and then

organizes the digest screen with the texts and the corresponding still images.